MAT-8823US

Application No.: 10/574,383

Amendment Dated October 4, 2010

Reply to Office Action of July 20, 2010

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A hermetic compressor comprising:

a hermetic container;

a motor element accommodated in the hermetic container; and

a compressing element that is accommodated in the hermetic container and driven by the motor element,

wherein

the compressing element has a shaft including an eccentric shaft and a main shaft, and a main bearing for pivoting the main shaft,

the motor element is a bipolar permanent magnet motor that has a stator including a stator core and a rotor including a rotor core,

the rotor core defines a hollow bore <u>and a through hole, the hollow bore</u> extending from a first axial end of the rotor core, the first axial end on the compressing element side of the rotor core, <u>the through hole extending from the first axial end of the rotor core to a second axial end of the rotor core, the hollow bore having a diameter larger than a diameter of the through hole, and</u>

the rotor core includes a built-in permanent magnet, an axial length of the permanent magnet being less than an axial length of the rotor core, the permanent magnet being positioned in the rotor core so that it extends from a from the second axial end of the rotor core opposite the hollow borebore,

an axial length of the bore is at least 1/3 of the axial length of the rotor core,

the main bearing is made of magnetic material,

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the main bearing extends substantially to a bottom of the bore such that the rotor core is rotatable with respect to the main bearing, and

a clearance between an inner surface of the bore and an outer peripheral surface of the main bearing is 0.5 to 3 mm.

2. (Previously Presented) The hermetic compressor according to claim 1,

wherein the axial length of the rotor core is longer than an axial length of the stator core.

3. (Original) The hermetic compressor according to claim 2,

wherein both axial ends of the rotor core are disposed outside both axial ends of the stator core, respectively.

- 4. (Cancelled)
- 5. (Previously Presented) The hermetic compressor according to claim 2, wherein the permanent magnet covers a region having no bore in the axial direction of the rotor.
- 6. (Currently Amended) The hermetic compressor according to claim 2, wherein,

the rotor core has a cylindrical through hole having a first diameter into which the shaft is inserted in the through hole,

the bore is a cylindrical recessed part that is formed in an upper part of the through hole and has a second diameter larger than the first diameter, and

the permanent magnet covers a region of the through hole <del>having the first diameter</del> in an axial direction of the rotor core.

- 7. (Cancelled)
- 8. (Currently Amended) The hermetic compressor according to claim 7 claim 1,

wherein the main bearing is one of a casting and a molded product that is made of ironbased sintered material.

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- 9. 10. (Cancelled)
- 11. (Previously Presented) The hermetic compressor according to claim 1, wherein the motor element is a self-starting permanent magnet synchronous motor,

the motor element has a plurality of conductor bars of a cage conductor on an outer periphery of the rotor core, and

the permanent magnet is disposed in an inner peripheral side of the conductor bars.

- 12. (Previously Presented) The hermetic compressor according to claim 1, wherein the permanent magnet is a rare-earth magnet.
- 13. 14. (Cancelled)
- 15. (Previously Presented) The hermetic compressor according to claim 2, wherein the motor element is a self-starting permanent magnet synchronous motor,

the motor element has a plurality of conductor bars of a cage conductor on an outer periphery of the rotor core, and

the permanent magnet is disposed in an inner peripheral side of the conductor bars.

- 16. (Cancelled)
- 17. (Previously Presented) The hermetic compressor according to claim 2, wherein the permanent magnet is a rare-earth magnet.
- 18. (Cancelled)